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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,489	09/25/2006	Cyrill Linnot	0543-1016	1031
<div>465 7590 02/19/2010</div> <div>YOUNG &amp; THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314</div>				
<div>EXAMINER</div> <div>KEMMERLE III, RUSSELL J</div>				
<div>ART UNIT PAPER NUMBER</div> <div>1791</div>				
<div>NOTIFICATION DATE DELIVERY MODE</div> <div>02/19/2010 ELECTRONIC</div>				

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

### Office Action Summary

**Application No.**

10/567,489

**Applicant(s)**

LINNOT ET AL.

**Examiner**

RUSSELL J. KEMMERLE III

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 34-44, 46-62, 67, 68 and 70-72 is/are pending in the application.
- 4a) Of the above claim(s) 46-62, 67 and 68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-44, 70-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

Claims 34-44, 70 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner (DE 10130186).

Wagner discloses a mold for slip casting a ceramic article where a slurry is poured into a porous body and an inflatable body is introduced into the slurry and inflated creating a hollow area in the ceramic being formed while a wall is delimited. This mold includes a permeable exterior portion as well as an impermeable interior portion (a liner). Wagner discloses a device holding the inner portion that could be considered a support (shown as reference number 9 in the figures) which appears to be made of a stiff material as it is able to support the liner against the pressure of the suspension until the green body is formed. Therefore, at least one area of the interior portion (the top where the support is present) would have sufficient inherent stiffness to delimit a wall of the preform while the slurry is cast in to the mold.

Wagner shows the support for the liner in contact with the exterior face of the liner, as opposed to current claim 34 which recites that the support is in contact with the interior face of the liner.

Wagner shows the liner attached to the inside of the support structure (that is, the support structure is in contact with the exterior of the liner) which is one of only two possible arrangements (that, or the support in contact with the interior of the liner as

recited in claim 34). Thus, it would have been obvious to a person of ordinary skill in the art to try attaching the liner to the inside or outside of the support structure, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp.

The support structure, like all mold parts, are used to guarantee what the shape of the formed body will be.

Referring to claim 35, Wagner shows the distance between the interior inflated body and the exterior mold as being close to constant across most of the mold (Fig 3). Since the term "substantially constant" is not defined in any greater detail by the current specification, this is assumed to meet the limitation of claim 35.

Referring to claim 36, while Wagner does not specifically disclose the dimensions of the ceramic article created, it would be within the ability of one of ordinary skill in the art to adjust the distance between the inner portion and the outer mold in order to create an article of the desired size according to methods commonly used and understood.

Referring to claim 37, Wagner discloses a slip casting type of mold, which one of ordinary skill in the art would understand means it would absorb liquid in a manner similar to plaster (and in fact often is plaster).

Referring to claim 38, the inner portion is described as balloon like and is inflated (deformed) to achieve the final shape used to form the body.

Referring to claim 39, the inner portion of Wagner is deflated (removed toward the interior) in order to remove it after the article is formed.

Referring to claims 41 and 43, it would be obvious to one of ordinary skill in the art that the inner portion should be made from a material which is inert to the slurry to prevent any reaction from occurring and resulting in undesirable properties in the article formed, and silicone is a material known to be inert to ceramic slurries and capable of the deformation required by Wagner.

Referring to claim 40, the selection of the materials discussed above would meet the limitations of claim 40.

Referring to claim 42, the inner portion of Wagner is removed by deflating which causes it to come unstuck from the article being formed.

Referring to claim 44, the inner portion of Wagner would inherently have to have an air injection hole in order to perform the inflation operation described.

Referring to claim 70, making the liner of Wagner separable would be well within the abilities of one skilled and obvious were it desired that the liner be able to be removed from the support. See *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except that in the prior art the cap is "press fitted" and therefore not manually removable. The court held that "if it were considered desirable for any reason to obtain access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose.").

Referring to claim 71, the liner of Wagner does not require any external pressure to delimit a wall of the preform. While it may not be done in the shape desired and shown by Wagner, it would be able to delimit a portion of the slurry.

***Allowable Subject Matter***

Claim 72 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Wagner, nor the other prior art of record, discloses a mold as discussed above where the support is in contact with the entire interior surface of the liner.

***Response to Arguments***

Applicant's arguments filed 1 December 2009 have been fully considered but they are not persuasive.

Applicant argues that Wagner fails to disclose that the balloon is flexible in the area where the pipe holds the element.

However, such a limitation is not found in claim 34. Claim 34 only requires that the liner (corresponding to the balloon of Wagner) have an exterior face which is impermeable and sufficient flexibility. There is no requirement that the liner be flexible in the portion where it is connected to the support.

Applicants next argue that the balloon of Wagner is not in contact with the slurry in the area delimiting the usable portion.

It is unclear what is meant by this. The great majority of the balloon of Wagner is in contact with the slurry and defines a usable portion which delimits the slurry in forming the cavity to be shaped.

Applicants next argue that the balloon of Wagner, in its inflated state, acts like a rigid wall, and therefore fails to meet the flexible limitation of claim 34.

This is not found to be persuasive because claim 34 recites a liner with flexibility. What Applicants are discussing in this argument are directed more to intended use or methods of using the mold. Since claim 34 is directed to a mold, only structural limitations are given weight. The relevant structure of claim 34 in this area is a flexible liner, which the balloon of Wagner is.

Applicants next argue that the pipe in Wagner does not meet the limitations of the support of claim 34. However these arguments again appear to be based on the intended use and operation of the mold, and are not based on the actually structural limitations of the support found in claim 34, which are met by the pipe of Wagner.

Applicant's arguments with respect to claims 70 and 71 are addressed above in the rejection.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicants argued in the last response that any rejection in this Office action based on Wagner with the accompanying English translation could not be made final since it would be a new rejection presented for the first time.

However, as stated in MPEP §706.02(II):

In limited circumstances, it may be appropriate for the examiner to make a rejection in a non-final Office action based in whole or in part on the abstract only without relying on the full text document. In such circumstances, the full text document and a translation (if not in English) may be supplied in the next Office action. Whether the next Office action may be made final is governed by MPEP §706.07(a).

That is exactly what was done in this case. Since the rejection was not changed except in response to amendments made by the Applicants, this rejection was deemed proper as final as governed by MPEP §706.07(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUSSELL J. KEMMERLE III whose telephone number is (571)272-6509. The examiner can normally be reached on Monday through Thursday, 7:00-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/  
Supervisory Patent Examiner, Art  
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